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THE

Business Side of Farming

PART I
FARM RECORDS

BY
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DEAN SCHOOL OF COMMERCE
OREGON AGRICULTURAL COLLEGE

SECOND EDITION

Oregon Agricultural Press
Corvallis, Oregon
1911

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1911

Ruled Blank Books

With printed headings may be obtained from the College Bookstore, Corvallis, Oregon

By transfer

APR 29 1915

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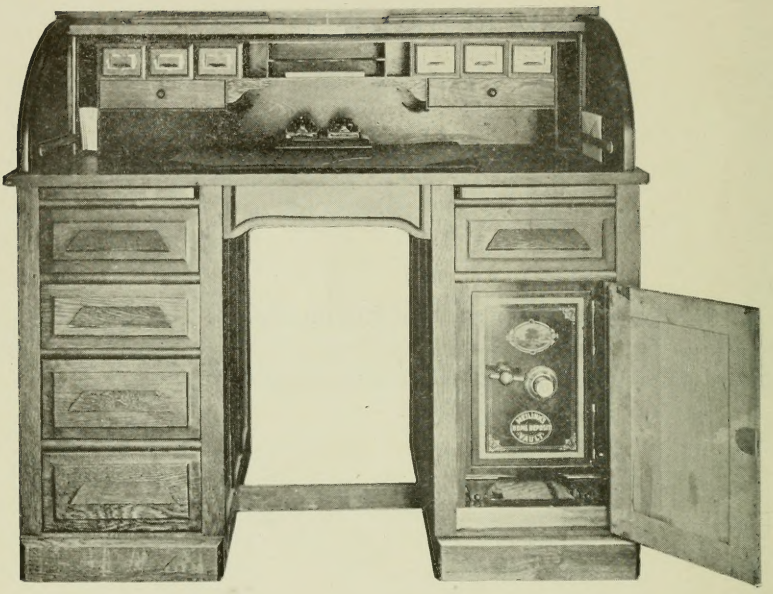
The College Bulletins are sent free on request. Questions on any phase of *The Business Side of Farming* will be cheerfully answered. Address Prof. J. A. Bexell, Corvallis, Oregon.



This desk is provided with a fire-proof safe, combination lock, with ample capacity for valuable records. See page 46.

THE FARMER'S DESK.

CHAPTER I

INTRODUCTORY

It is a truism to say that the financial side of farming is of the utmost importance. But the fact remains that this side of the world's greatest industry is almost entirely neglected by both the farmer and the schools. Professor Bailey says on this subject: "In visiting practically every farm in one of the counties of the state (N. Y.) we did not find one man who knew how much it cost him to produce milk or raise any of his crops."

Prosperity of the Farmer

The Secretary of Agriculture, in recent Year Books, points out the remarkable prosperity of the farmer; that the export of farm products is vastly in excess of all other exports combined; that a million agricultural debtors have been transformed during the last ten years into the same number of surplus depositors; that, "contrary to his reputation, the farmer is a great organizer, and that he has achieved remarkable and enormous successes in many lines of economic cooperation in which the people of other occupations have either made no beginning at all or have nearly if not completely failed." He points out that most farmers live better than the average merchant or mechanic.

Causes of Success

It is doubtless true that the farmer is becoming a factor to be reckoned with in the business world; that the average farmer knows vastly more about scientific farming than his father did; he understands more thoroughly the value of proper cultivation, of fertilization, of rotation of crops, and of diversified farming; but it cannot be said that he owes his success to improved business methods. He has been successful, rather, in spite of his ignorance in this respect, and because of the lavish generosity of Mother Nature.

Two Phases of Farming

The business of farming assumes two distinct phases: the productive phase and the exchange phase. The one aims to

extract the treasures from the soil; the other, to place them in the hands of the consumer. It is important not only to raise abundant crops, but also to sell the products to advantage.

Importance of the Exchange Phase

The importance of the exchange phase is often lost sight of. A farm may be forced to yield to its maximum capacity, labor may be managed properly and waste reduced to a minimum; and yet the net result may be a loss at the end of the year. As a general economic proposition, it might be said that large crops often result in serious loss to society as a whole. If the net value to the consumer is less than the labor and capital expended on the crop, society is the loser by the difference. Hence the importance of a thorough understanding by the farmer as well as by the merchant and manufacturer of the laws and methods of exchange or commerce.

Farming a Paying Business

That farming is a science has been emphasized so much that the fact that it is also a business is often lost sight of. It is a real business, and one which pays the United States close to eight billion dollars annually. It has been demonstrated repeatedly that no legitimate business pays better than farming. It may be a little more up-hill work at the start, since most farmers begin business with small capital, but it is incomparably safer in the long run, and will insure a competence for old age with greater certainty than any other occupation. But let it ever be borne in mind that the condition for success is that *farming must be conducted on business principles.*

CHAPTER II

OBJECTS AND METHODS OF BOOKKEEPING

Accurate records and accounts are absolutely necessary in the management of every business enterprise, great or small. No business can be successful in the long run unless its condition can be determined at any time, and no conservative business man will fail to prepare a financial statement at the end of his fiscal year. He must determine how he stands, not only with others, but with himself.

Object of Keeping Accounts

One object of keeping accounts is to assist in accumulating property. Another important object is to record a continuous history of business transactions for future guidance. Not only is this profitable, but it is a source of real pleasure and satisfaction to know our standing with those with whom we deal as well as the profits and losses in our business enterprises.

What the Records Should Show

A complete system of farm records should enable the farmer to tell at any time how his business stands with himself and others; the cost of production of staple crops and live stock and the periodical results of both the productive and the exchange phase of his operations. The records should also show personal and household expenses, and, finally, a comprehensive history of the various phases of the enterprise, including plats of crop rotation, fertilizing, etc.

Difficulties of Farm Bookkeeping

Numerous systems of farm bokkeeping have been proposed, but the trouble with them all is that they are either too complicated or altogether unpractical. Professor Bailey says: "The entire subject of farm accounting must be attacked in a new way. The ordinary bookkeeping will not apply." The reason is obvious. Farming is a much more complicated business than most people suppose. A farmer is both a producer and a dealer. He needs financial records as complete as the

average merchant and cost records as accurate as those of the manufacturer. But the records must be adapted to the business in hand. "The ordinary bookkeeping will not apply." The farmer is usually a very busy man. His chief difficulty is neither ignorance nor indolence. He has little time for fancy bookkeeping and still less for "red tape." What he wants is a plain, simple, straightforward history of his business, so arranged and classified as to require the minimum effort to keep it up. It may be interesting for his children to learn the conventional use of red ink, rulings, closing of books, the intricacies of journalizing, etc., but all this is not necessary to a proper understanding of farm bookkeeping.

Methods of Bookkeeping

In the following pages I suggest two methods of farm bookkeeping whereby the yearly profit or loss may be determined and compared from year to year. The first is extremely simple Single Entry, while the second method is a comprehensive, but very simple, Modified Double Entry, by which the financial standing, the cost of production, profits and losses, etc., can be ascertained at any time. Any farmer with average intelligence will be able to master either method with small expenditure of time and labor.

ALPHABETICAL FILE

CHAPTER III

SINGLE ENTRY

The Day Book

The most important record in this method of bookkeeping is the *Day Book*, or what might properly be called the *History of the Farm*. This should be written in the form of a diary, without attempting a close classification of the entries. Always bear in mind, however, that it is safer to give too much rather than too little information in the records. The Day Book should contain any memoranda which might prove valuable for future reference. Conditions of the weather, time of planting, breeding, division of fields, sales, purchases, loans, attendance at conventions, valuable recipes, etc., are proper subjects for entry. Though it is advisable to keep the book as neat as possible, it is unnecessary to spend much time for that purpose. It is more convenient to jot down items in lead pencil as they come along, and then, as time allows, classify them under their respective heads.

The Day Book and Cash Book Combined

In the form on page 13, the Day Book and Cash Book are combined. The ruling is that of an ordinary stock Day Book. In the left-hand column is entered all sums received and in the right-hand column all payments.

While the combined Day Book and Cash Book has the advantage of extreme simplicity, it is often more satisfactory to devote a part of the Day Book, or a separate book, exclusively to cash transactions. Where this plan is followed, it is unnecessary to record all the Cash items in the Day Book. The left-hand page is used for cash receipts and the opposite page for payments.

Bill and Receipt File

A very important part of the farm records is the Bill and Receipt File. A part of the Day Book can be devoted to that purpose, but it is better to provide a separate book. In it should be securely pasted all bills for machinery, implements,

Day Book. April 1, 1908

Six years ago to-day I purchased my present farm investing cash $6000.00. Following is an accurate inventory of all my property and a statement of my affairs as they stand to-day

Financial Statement No 1 Hans Farm
April 1, 1908

Resources			
Farm, 160 A. (market value)			8000
Produce:			
200 bu Corn	50	100	
150 bu Oats	45	67.50	
200 bu Wheat	85	170	
20 tons Hay	6.00	120	
Potatoes and Vegetables		50	507.50
Stock:			
6 Horses, average	100.00	600	
20 Cows "	40.00	800	
11 Steers "	12.00	132	
5 Heifers "	11.00	55	
12 Hogs "	6.00	72	
100 Sheep "	3.00	300	1959
(Remainder of Resources omitted)			10832.25
Life Insurance (Paid-up value)			964.36
Cash			170
Total			12684.11
Liabilities			
Labor unpaid		75	
Accounts Payable		125.15	
Mortgage due April 1, 1910		3000	3200.15
Net Worth			9483.96

OPENING ENTRY AND INVENTORY

Day Book, April, 1908.

			Received	Paid
Mond.	1	Cash on hand	170	
	1	Heavy rain storm		
		Shod Cap and Maud		3
		2 Tons Coal		8
Tues.	2	Attended Breeders' Convention		
		at Portland. Program and report		
		File p.16. Expenses		8.40
Wed.	3	Paid grocery bill at Murdocks		11.40
		Bill on file, p.16		
Thurs.	4	Bought milch cow of J. C. Smith		40
	4	Attended concert of the Boston		
		Jubilee Singers with family		2
Frid.	5	Sold calf to P. A. Anderson	7	
		1 pair Gloves		1.50
Sat.	6	Bought for cash		
		1 Ax 1.00, Hammer 45¢, Nails 50¢		1.95
	6	Went to Portland to select		
		implements, expenses		3
Sund.	7	Dr. E. Hamilton preached on		
		"Civic Honor." Collection		.25
Tues.	9	Shoes for Teddie		2
		Forwarded	177	81.50

DAY BOOK

tools, livestock, nursery stock, furniture, etc., which will be subject to inventory, but not bills for supplies, feed, table expenses, etc.; also receipts for the payment of money, cancelled notes, certificates of pedigree, important clippings from periodicals, and any other matter of interest. This will prove an invaluable record for future guidance. Many prefer the alphabetical file, illustrated on page 10.

The Inventory

The inventory may be considered the most important document among the farm records, because without it no results at all can be obtained. It should be taken at such a time as will give the most accurate results with the least expenditure of labor. This differs widely in different localities. January 1st seems the most natural beginning of the fiscal year, but the objection is that at this time there is apt to be a large quantity of feed and supplies on hand.

April 1st would be a better date so far as stock on hand is concerned, but inconvenient in many localities on account of the pressure of spring work. Whenever it is taken, it should be accurate. No guess work should be tolerated. Weigh and count; do not estimate. Then assign the actual market value to the property, taking due account of depreciation.

Depreciation

Neither an old wagon nor an old horse is worth as much as new ones. The same holds true with very few exceptions of all equipment, animals, houses, and improvements. The question as to what rate shall be charged off annually, so as to create a sinking fund with which to renew the depletion, has been an open question with accountants since time immemorial. It is particularly difficult to determine the depreciation of live stock, work horses, and a depletion of the fertility of the soil. Without entering into a discussion of the subject, I give below the experience and opinion of the best authorities on the subject. The thoughtful farmer will find no difficulty in adjusting these rates to suit his conditions. For the purpose of general estimates, the following rates on the cost or market value are fairly accurate:

Buildings (including insurance and repairs) . 5 per cent.
Horses, above 5 years.....10 per cent.
Milch cows ..... 8 per cent.
Machinery and tools.....10 per cent.

How to Determine the Profits

The all-important question at the end of each year is: Has the work for the year been a financial success or failure? To determine the profits or losses is, therefore, a problem to be solved each year. As a matter of fact, it is a very simple problem, and it becomes easier the oftener it is done.

Let us assume that heretofore you have kept no books whatever, but you have now decided to make a start. You have procured a simple, substantial Day Book (may be purchased at any stationery or drug store), and after listing all your property, you are prepared to make the entries shown in the illustration. April 1st is selected as the beginning of the fiscal year, because on that date the supplies, grain, feed, etc., are usually low, and the average farmer has considerable time to spare. Of course, this varies in different localities, and any other date may be selected to suit the farmer's convenience. The proper opening entries, including the inventory, are shown on page 12.

A Year Later

A year has passed and we are now ready to determine the result of the year's work. Since we have kept the only memoranda in the day book, the best we can do is to take another inventory exactly similar to the last one. This we will now proceed to do.

The second financial statement and the statement of Profit and loss are illustrated on page 17.

Net Earnings

The net profits shown in the illustration, page 17, include the interest on the investment and the wages of the members of the family. To find the net earnings of the proprietor, the value of the household goods, life insurance, cash, and the cost of the dwelling should be deducted from the last year's inventory. Then find the interest on the remainder at a fair rate; this deducted from the profit gives the earnings of the

family. This is illustrated further in Lesson 11. If members of the family, engaged in productive work, receive regular pay before the statement is made, the final result is the net profit above wages and interest. The question might be asked: why deduct the value of the dwelling before the interest is taken? The reason is that the dwelling is not a productive investment. It is apt to be more or less valuable than the average standard, according to the taste and ability of the owner. Amounts drawn for personal use should, of course, be added to the net earnings.

Continued Inventories

It is often convenient to tabulate the annual inventories as follows:

ITEMS	April 1 1908		April 1 1909		April 1 1910		April 1 1911	
Farm, 160 acres (market value)	8000		8620					
Produce	507	50	547	86				
Stock	1959		1966					
Poultry	.....							
Life Insurance	964	36						
Cash	170		126	04				
Total								

Personal Accounts

A farmer frequently retails his products to his neighbors or to townspeople, if he lives near town. In such cases it often happens that he can sell to better advantage by running an account with steady customers, collecting by the week or month. If this phase of the business is extensive, as is the case in truck farming, dairy, poultry, and the like, it would pay the farmer to provide tickets or coupons and sell five or ten dollars' worth in advance even at a small discount. But generally an account with each customer kept either in a separate book or in part of the Day Book, will be found satisfactory. However, most farmers sell their products for cash, or exchange for merchandise, which is equivalent to cash sales. It is, therefore, unnecessary to enter into an elaborate discussion of keeping such accounts.

Some farmers, very unwisely, attend to the personal business of their hired help, even to the extent of buying their smoking tobacco. There is absolutely no excuse for such a

Financial Statement No. 2, April 1, 1909

Resources.

Farm, 160 A (market value)			8620
Produce			
Grain 150 bu. Corn	.55	82.50	
175 bu. Oats	.43	75.25	
253 bu. Wheat	.87	220.11	377.86
Hay 20 tons Clover	6.50		130
Potatoes & Vegetables			40
Stock			
6 Horses average	100.00	600	
1 3-year old Horse "Jim"		150	
22 Cows Average	42.	924	
14 Steers "	13.	182	
11 Heifers "	11.	44	
11 Hogs "	6.	66	1966
Poultry			
165 Chickens	.45	74.25	
25 Turkeys	.75	18.75	
10 Geese	.70	7	100
(Remainder of Resources omitted)			2602.40
Cash & Bank			126.04
Total			13962.30
Liabilities			
Labor (unpaid)		85	
Accounts Payable		142.32	
Mortgage, due April 1, 1910		3000	
Note, favor Western Lumber Co.		200	
Due on Pears		200	3627.32
Net Worth			10334.98
Statement of Profit & Loss			
Net Worth now		10334.98	
Net Worth last year		9483.96	
Net Profit			851.02

SECOND FINANCIAL STATEMENT

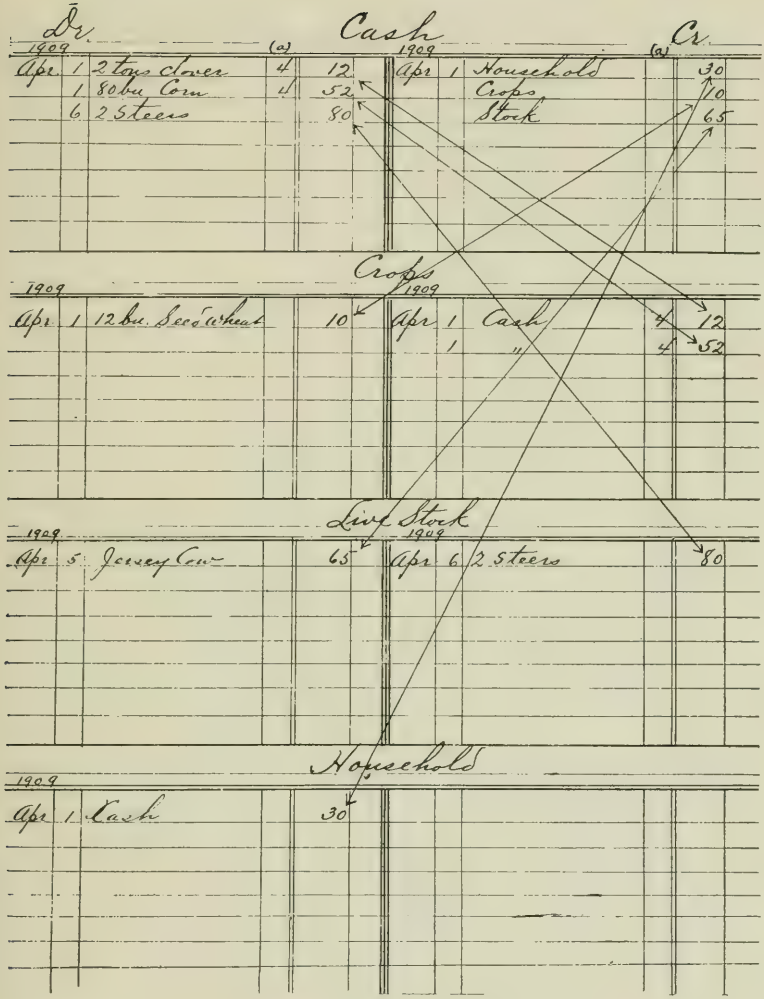
Others Owe Us

Mrs. Richard King

1908			Debit	Credit
May	1	Balance	3 80	
	1	1 lb. Butter	20	
	3	2 doz. Eggs	30	
	5	1 Chicken	30	
	12	2 lb. Butter	40	
	18	2 qt. Strawberries	30	
	25	1 qt. Cream	20	
	31	1 lb. Butter	20	
	31	Cash		5
			5 70	5
June	1	Balance due	70	

Adams Mercantile Co.

1908			Debit	Credit
June	4	5 bu. Potatoes	3 75	
	8	60 bunches Onions	2	
		10 doz. Sweet Corn	2	
		Groceries as per bill, File 17		6 50
	15	8 Crates Strawberries	14	
		20 doz. Eggs	3	
		1 Side for William		13
			24 75	19 50
July	1	Balance due	5 25	



DOUBLE ENTRY LEDGER

practice. Rather pay your help in installments and let them settle their own bills.

Accounts with persons we owe are generally unnecessary. Most merchants furnish either a pass book, in which the account is shown in detail, or an itemized bill is furnished with each purchase. These bills should be pasted in the Bill File and checked off when paid. In the great majority of cases this will prove more satisfactory than ledger accounts.

A special ledger can be provided, or separate pages of the Day Book devoted to special accounts. This classification is made either daily, weekly or monthly, as time and circumstances allow.

CHAPTER IV

MODIFIED DOUBLE ENTRY

Ancient Methods

Not many generations ago it was considered sufficient for the average manufacturer merely to record his cash receipts and expenditures and to keep a tolerable accurate check on the cash balance. In many instances, the left trousers pocket served as the debit side and the right as the credit side of the "Ledger." Modern business methods and sharp competition have changed these notions until today it is necessary to know the cost of production in advance to the smallest detail. Ancient business methods prevail yet, very generally, on the farm. The wonderful progress of the American farmer is due to marvelous natural resources, labor-saving inventions, and natural ingenuity, rather than to wise and prudent management.

Necessity of Careful Management

In certain respects, a farmer must combine the methods of the manufacturer and the merchant. He must learn, not only how to increase production, but also how to facilitate the profitable exchange of his products. He must reduce the cost of production to the minimum by increasing the quality and the quantity of his products, and by getting full value out of labor. He must manage so that his working force, farm hands, children, horses, all, are constantly employed. This requires most skillful management in the rotation of crops, in the division of labor, in selecting seeds, fertilizers and stock; and, above all, it requires general prudence in purchasing equipment and supplies, and in marketing products. Progressive farmers require a variety of records to assist in the proper management of their business. A first-class set of books is just as indispensable to them as to the banker or to the manufacturer.

Superiority of Double Entry

A careful comparison of the results obtained in the last chapter with the balance sheet given on page 39 will convince the reader of the superiority of double entry. It will be ob-

RECEIPTS *April* 1908

DATE	ITEMS	TOTAL	GRAIN	HAY	ORCHARD, GARDEN	STOCK	DAIRY	POULTRY	SUNDRIES
1	Balance FORWARDED	126 04							126 04
	2 tons Clover	12		12					
	80 bu. Corn .65	52	52						
3	1 doz. Cabbage	1 20			1 20				
	25 lb. Butter .25	6 25					6 25		
6	2 Steers	80				80			
	20 Spring Chickens .45	9						9	
	Hauling Coal 1 day	5							5
9	Jersey Calf	10				10			
	2 Cords Wood	8							8
	5 bu. Potatoes	5			5				
12	1 Heifer	25				25			
	10 lb. Butter .28½	2 85					2 85		
13	75 bu. Corn .65	48 75	48 75						
	Work on County Road	5							5
	4 bu. Apples	6			6				
15	20½ doz. Eggs .20	4 10						4 10	
	36 lb. Butter .25	9					9		
	2 tons Clover	12		12					
17	100 Apple Trees	20			20				
	1 Steer	37				37			
	12 Cedar Posts	2 40							2 40
19	6 Spring Chickens	2 40						2 40	
	95 bu. Corn .60	57	57						
	3 tons Hay	18		18					
20	Jersey Calf	10				10			
	50 bu. Oats .35	17 50	17 50						
23	1 Turkey	1 40						1 40	
	1 bu. Clover Seed	1 50		1 50					
26	18 lb. Cheese .15	2 70					2 70		
29	3 Cords Wood	12							12
	10 bu. Barley	4	4						
	4 tons Timothy 5.50	22		22					
30	Produce for Household	18 05			5 25		6 50	6 30	
	FORWARDED	653 14	179 25	65 50	37 45	162	27 30	23 20	158 44
1	2	3	4	5	6	7	8	9	10

GENERAL FARM

PAYMENTS

DATE	ITEMS	CK. NO.	TOTAL	HOUSEHOLD PERSONAL	SEEDS, FERTILIZERS	HIRED LABOR	GEN'L EXP. MARKETING	STOCK, FEED	IMPLEMENTS	IMP'MTS, REPAIRS	SUNDRIES
	FORWARDED										
1	Household Expenses	42	30	30							
	12 Bu. Seed Wheat 83⅓	43	10		10						
3	Labor 1.50, Shoeing 3.00		4.50			1.50	3				
5	Interest, M. P. Co	44	20								20
	Jersey Cow	45	65					65			
	Laths & Shingles	46	3.75							3.75	
6	Garden Seeds		1.60		1.60						
	Road Tax	47	3								3
8	Addition to Barn	48	80							80	
	Crates & Bags	49	15.40				15.40				
9	Wages to Johnson	50	10			10					
	Steel Frame Grind Stone	51	3.50						3.50		
12	200 ft Lumber, $10 per M.		2.00							2.00	
	1 Shovel		1.25						1.25		
13	Household Expenses	52	30	30							
	John Smith, 2 days		2.50			2.50					
	Staples		.35							.35	
14	Taxes	53	30.40								30.40
15	Personal Ex		3.50	3.50							
	1 Rip Saw		2.50						2.50		
	Item to 22nd omitted										
23	Trees & Shrubs	60	25.80		25.80						
	Alfalfa Seed		3.20		3.20						
	2 Doz Leghorn Eggs	61	5.80					5.80			
25	Interest on Binder Note	62	2								2
	1 Angora Goat	63	10					10			
	Private Incidental Ex		5	5							
	6 Gopher Traps		1.50						1.50		
26	Repairs on Horse Stalls	64	13.50							13.50	
	Keystone Dehorner	65	10.50						10.50		
29	2 Geese		3					3			
	Wages to Johnson	66	10			10					
	Apple Boxes		3.75				3.75				
30	Butter Wrappers		1.75				1.75				
	Life Ins. Premium	67	35.10								35.10
	Produce for Households		18.05	18.05							
	FORWARDED		578.80	116.55	62.00	36.50	30.90	90.90	21.05	114.60	106.30
11	12	13	14	15	16	17	18	19	20	21	22

CASH BOOK

served that the only result obtained by a comparison of inventories was the net profit or loss. The source or causes of these results cannot be obtained by this method. The method suggested in Chapter III has this advantage: There is not a farmer so busy or so ignorant that he cannot adopt it and derive great benefit from its use. But the ambitious, progressive farmer will not be satisfied with this primitive method any more than a wide-awake merchant will be satisfied with single entry bookkeeping. He will adopt a system which will give him at any time reliable information as to his financial standing, cost of production of crops, live stock and poultry, household expenses, etc., and by which he can prove that his work is correct.

Single and Double Entry Compared

The distinction between single and double entry is unimportant for our present purpose, but it may be a satisfaction to the reader to know that the method we are now to consider is double entry in a modified form. The important distinction between the two methods is that in double entry accounts are kept with persons, property, and allowances, while in single entry accounts are kept with persons only. In double entry there is a corresponding debit for every credit; the total debits and credits must, therefore, be equal, and must balance at any time. This becomes clear by referring to the Cash Book below. In the first entry, the amount is entered in both the Total and in the Sundries column; and the same is true of all the succeeding entries. Hence the sum of columns four to ten inclusive must equal the total in column three. You will find the same to be true of the Payments, and of the Household Accounts.

Additional Books Needed

Very important books in double as well as in single entry are the Day Book and the Bill File. They are to be kept in exactly the same way as suggested under single entry, except that no cash entries are recorded in the Day Book, which is kept only as a diary. The important consideration now is to adopt additional records that will furnish the necessary information in systematic and tabular form, and requiring the minimum amount of labor.

The Cash Book

The *Cash Book* is the basis of classification. A very convenient form is given on pages 23 and 24. The special columns take the place of a ledger. All money columns except the total column will be referred to as Distribution Columns. They are in reality separate accounts, and this form might, therefore, properly be called a combined Ledger and Cash Book. The form suggested has the important advantage of being self-balancing. A trial balance can be taken at the end of each page, month or year, as illustrated on page 33. The process of preparing a financial statement becomes extremely simple by this method. A few observation regarding equipment and supplies, improvement and repairs will be of assistance in using the distribution columns.

Equipment and Supplies

In accurate accounting, the question often arises: What shall be considered equipment, and what supplies? Supplies are defined as expendible or consumable materials, which are incapable of being used more than once; while equipment is of more permanent character, articles which can be used repeatedly. Fuel, lubricating oil, cotton waste, feed, etc., are supplies; while machinery, furniture, and apparatus of all kinds are equipment.

Improvement and Repairs

The distinction between improvements and repairs is not always clearly understood. An improvement adds value to the property, in the shape of equipment, buildings, drains, fences, and the like; while repairs merely keep up the property. A coat of paint on an unpainted building is an improvement; repainting is classed under repairs. This distinction is very important in making an inventory. Improvements are added to the inventory, repairs are not.

Cash Balance and Sundry Columns

The cash balance is found as follows:

Total receipts	$653.14
Total payments	578.80
Balance	$ 74.34

Note that the totals of columns four to ten equal the total of column three; and that columns fifteen to twenty-two equal column fourteen. The Sundries column contains all entries which do not fall under the special columns. At the end of the year, the items are segregated under various titles. The segregation for the month of April is as follows:

Sundry Receipt Column (10):

Balance	$126.04
Labor	10.00
Wood	22.40
Total	$158.44

Sundry Payment Column (22):

Interest	$ 22.00
Taxes	33.40
Accounts Pay	15.80
Insurance	35.10
Total	$106.30

Improvements and Repair Column (21):

Improvements	$ 80.00
Repairs	34.60
Total	$114.60

Trial Balance

In the language of the accountant, a trial balance is a test of the equality of the debits and credits in a set of double entry books. Our trial balance is much simpler; it is simply a test of equality of the total columns and the distribution columns. In the Cash Book, merely add the distribution columns on each side and note that their sum equals the respective total columns. The Household and Shop accounts are balanced in the same manner.

Banking

The enormous increase in bank deposits in rural communities is the best evidence that the farmer is beginning to appreciate the value of better system in his finances. It is claimed that fully ninety-five per cent. of the country's business is done by credit currency, such as checks, drafts, money

Martin Harris in account with Citizens' Nat. Bank

Date 1908		No	Payee		Deposits	Checks	Bal.
Apr	1		Deposit		98.35		
	1	350	Mrs Harris	✓		30	
		1	Odell Seed Co.	✓		10	58.35
	3	2	Emma Johnson	✓		1.50	
		3	Brown & Puckett	✓		3	
			Deposit		70		
	5	4	Silem Implement Co	✓		20	103.85
		5	E. Skidmore	✓		65	
		6	Empire Lumber Co	✓		3.75	
	6	7	County Recorder	✓		3	
			Deposit		90		
	8	8	Earle & Crockett	✓		80	42.10
		9	Farmers' Supply Co.	✓		15.40	
	9	360	Frank Johnson	✓		10	
		1	Goddard Hardware Co			3.50	
		2	Mrs Harris	✓		30	
			Deposit		40.50		
		3	Crown Fertilizer Co.	✓		6.40	
		4	O. N. Smith	✓		15.80	
	13		Deposit		125		
		5	County Treasurer	✓		30.40	
		6	Kimball Lumber Co			15	
		7	Brown & Puckett	✓		2.50	
	20	8	C. J. Olson & Son	✓		15	63.60
		9	Harring & Bacon			10	
	23	370	Crawford Hardware Co.	✓		10.50	
		1	Brown & Puckett			13.30	29.80
			Proof:				
			Balance above		29.80		
			Outstanding.				
			No. 361		3.50		
			366		15		
			369		10		
			Balance as per Pass Book		58.30		

BANK ACCOUNT

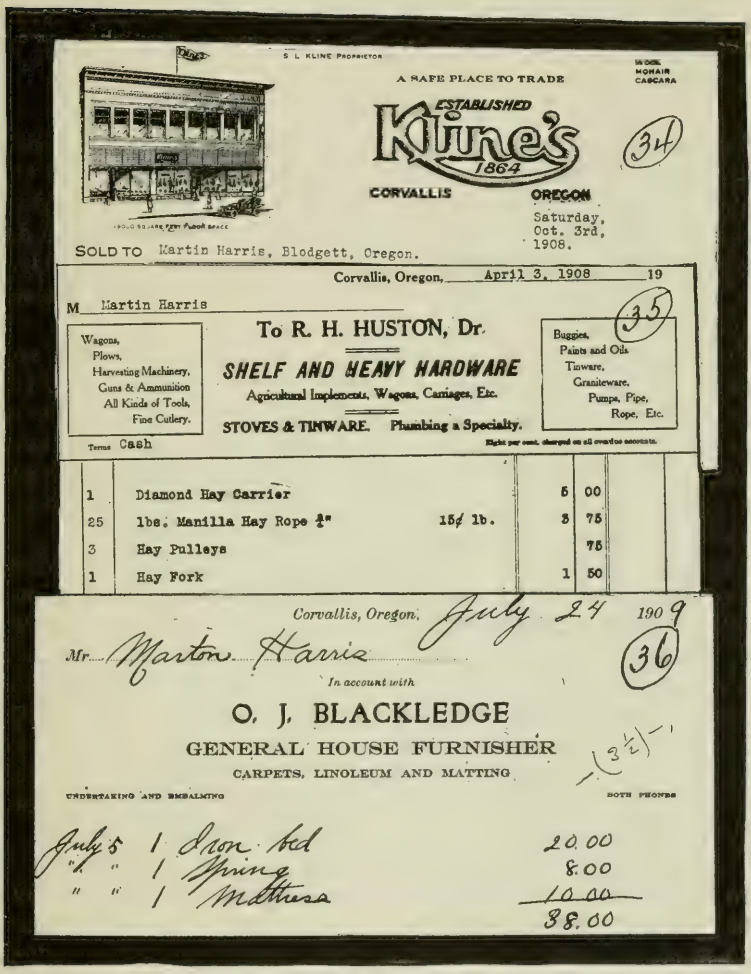
orders, notes, and the like. Many good business men keep only their bank book, and this is far more satisfactory than no bookkeeping at all, especially if bills and receipts are filed for reference. The bank account may be carried entirely independent of all other records.

Banking carries with it many advantages. Important among them are:—

1. The depositor's credit and influence are measured largely by the size and regularity of his bank account.
2. A tendency to economize by a desire to increase the bank balance.
3. The banker becomes your bookkeeper and business counselor.
4. Security against fire and robbers.
5. Indorsed checks are both records and receipts of payments.
6. A benefit to the community by keeping the money in circulation.
7. Convenience in making change.
8. The bank will always loan to a good depositor in preference to one who is not a depositor.

There are only two operations in banking which need discussion here—depositing and checking. The banker will give all necessary directions regarding both, except as to keeping the individual account. This is illustrated on page 27, and will be thoroughly understood after Lesson 5 has been worked out. The special column Cash Book, pages 22 and 23, is an excellent form for keeping the bank account. If all cash is deposited and all payments made by check, the difference between the total columns represents the bank balance. As to deposits, it is preferable to deposit all cash, and then draw out for personal use as needed.

The method of handling checks is as follows: Record the payee, number, the amount, as illustrated under Cash Payments, page 38. The checks are satisfactory receipts, but the itemized bills should be pasted in the Bill File and bear the same number as the checks. The bank will usually furnish all necessary stationery free of charge. The bank balance is considered a part of the cash on hand, so that no special account except the check stubs and pass book need be kept with the bank. The bank balance is proved each month as



S. L. KLINE PROPRIETOR

A SAFE PLACE TO TRADE

WOOL MOHAIR CASCARA

ESTABLISHED Kline's 1864

CORVALLIS OREGON

(34)

Saturday, Oct. 3rd, 1908.

SOLD TO Martin Harris, Blodgett, Oregon.

Corvallis, Oregon, April 3, 1908 19

M Martin Harris

(35)

To R. H. HUSTON, Dr.

Wagons, Plows, Harvesting Machinery, Guns & Ammunition All Kinds of Tools, Fine Cutlery.

SHELF AND HEAVY HARDWARE

Agricultural Implements, Wagons, Carriages, Etc.

STOVES & TINWARE. Plumbing a Specialty.

Buggies, Paints and Oils Tinware, Graniteware, Pumps, Pipe, Rope, Etc.

Eight per cent. charged on all overdue accounts.

Terms Cash

1	Diamond Hay Carrier		5	00
25	lbs. Manilla Hay Rope ¾"	15¢ lb.	3	75
3	Hay Pulleys			75
1	Hay Fork		1	50

Corvallis, Oregon, July 24 1909

Mr. Marton Harris

(36)

In account with

O. J. BLACKLEDGE

GENERAL HOUSE FURNISHER

CARPETS, LINOLEUM AND MATTING

UNDERTAKING AND EMBALMING

BOTH PHONES

July 5	1	Iron bed	20.00
" "	1	Spring	8.00
" "	1	Mattress	10.00
			38.00

BILL AND RECEIPT FILE

follows: Arrange the checks returned numerically. List the checks not returned; add the outstanding checks to the balance shown in the check register; the sum should agree with the balance in the pass book. It is often convenient to keep a special check register. Page 27 is a convenient form, showing the method of proving the balance at the bottom of the page.

The Ledger

With a special column cash book, the ledger can be dispensed with in most cases. The further classification of the sundry columns can be done at the end of the year, as illustrated on page 26, and a few pages of the Day Book can be devoted to "What We Owe Others" and "What Others Owe Us." Where a special ledger is found necessary, the form shown on page 18 can be used.

The old style ledger possesses some advantages over any other form. The debit appears on the left and the credit on the right side on the same page. It is used in either double or single entry. The difficulty of keeping the ledger in balance prevents the use of the double entry ledger to a very large extent. This is especially true if an attempt is made to use the ordinary Journal.

Direct entries into either the double or single entry ledger present less difficulties, and the method is recommended where the classification of accounts is such as to make the combined Cash Book and Ledger unpractical. This need scarcely ever be the case, however, because if ruled sheets cannot be obtained without headings, a blank sheet may be ruled with any number of columns and headed with titles to suit. For example, an orchardist would head his Receipt Columns: Apples, Prunes, Peaches, Small Fruits, etc. While an exclusive stock farmer would devote special columns to the different kinds of stock.

The advantage of the ledger method is that each account is more condensed, while the self-proving and labor-saving features are important in the Special Column Cash Book. Preparing a trial balance and balance sheet, and closing the ledger properly, though very simple for the experienced accountant, requires a proficiency in bookkeeping that few farmers possess.

On page 19 is an illustration of the ordinary form of direct-entry ledger, showing the entries for April 1st. Compare these

with the first entries on pages 23 and 24, and note the similarity of results. In the form on page 19 follow the arrows and note that there is a debit for every credit, and vice versa. In the column marked (a) is entered the Day Book page, if the entries have been previously made in that book.

The Voucher System

It is often preferable, especially on a large farm, and in a corporate business, to pay all bills by check. When this plan is followed, it is unnecessary to copy the items, as in the illustration, page 24, but merely to write the name of the payee in the items column. The distribution should be noted on the bill or voucher, and all the vouchers, together with the canceled checks, should be filed in envelopes, properly numbered to correspond with the number of the check. The accounts are fully illustrated on page 38.

Adaptation of This System to Any Business

The foregoing system of accounting can be adapted very readily to any business, and it is especially recommended for a cash business, where the personal accounts are few. Instead of Hay, Grain, etc., the orchardist would head his columns Apples, Pears, etc., while other enterprises would use headings best suited to their business.

Orchard Accounts

On page 38 will be found two illustrations of the voucher system and the proper classification of orchard accounts. The only difference between the two forms is that Form B has a larger distribution of the payments and a smaller distribution of the receipts. Blank forms, No. 14-15 for A, and 16-17 for B, can be secured from the College Bookstore. The Assessment column in Form A, Receipts, is used in a corporate business. The personal accounts can be carried as illustrated on page 18, and the Special Records in Chapter VIII can be modified very readily to suit the needs of any special business. The continued inventory, illustrated on page 16, is recommended.

CHAPTER V

HOUSEHOLD ACCOUNTS

It will be seen that no provision has been made in the General Cash Book for separate items in the household accounts. This is left for the housekeeper. The fact that her field is somewhat limited, from a business point of view, is no argument in favor of loose and careless methods of accounting.

Most housekeepers prefer to receive a fixed allowance for household expenses, whenever it is practicable. For the present purpose we will suppose that the following agreement has been entered into between the farmer and his wife. She is to receive the following:

Monthly Allowances for Household and Personal Expenses

For proprietor and wife	$25.00
Board for hired help	15.00
For four children	32.00
Sundries	18.00
Total	$90.00

In addition to the cash allowance, vegetables, poultry and dairy products are furnished from the farm at market price. The proprietor gives his wife an allowance of $90 each month, either in one or in several payments, and enters it in his cash expenditures. His wife, in turn, enters her allowance in her record. Bills for furniture, clothing, and utensils are pasted in a Bill and Receipt File, same as in the Farm Accounts.

Note that the items entered in columns one and two are also entered in columns eight, nine, or ten, since they are purchases from the farm. Because they are entered both as receipts and payments, they do not affect the cash balance.

At the end of the year, the proprietor enters the totals of columns one and two in his cash receipts, under the proper headings, and at the same time they are entered as cash payments in the household column. See page 22, under April 30th. Thus the farm will receive full credit for what it sells to the household as well as to others.

It is suggested that the housekeeper open a private bank account and pay large items by check. See April 13th, 29th

and 30th. There are numerous advantages in keeping a bank account. See page 26. A bill for furniture, utensils, and improvements should always be taken and pasted in the Bill File. It is convenient to number the bills the same as the checks, as suggested in column six. Since endorsement by the payee constitutes receipt, it is generally unnecessary to take receipt when payment is made by check.

Page 34 shows a convenient form of a combined household Cash Book and Ledger. A summary of the receipts and payments is prepared at the end of the year, as shown on page 36.

Trial Balance

Groceries	$ 13.05
Meat	11.80
Dairy and Poultry	12.40
Clothing	16.85
Furniture and Utensils	22.05
Help and Laundry	11.60
Library	6.65
Light and Fuel	6.10
Gifts	2.35
Personal	1.25
Travel and Recreation	3.00
Incidentals	2.65
Physician and Medicine	1.50
Telephone Rental	1.50
Total	$112.75

The Voucher System

It is often preferable, especially in a large household, to pay all bills by check. When this plan is followed, it is unnecessary to copy the items, as in the illustration, but merely to write the name of the payee in the items column as shown under April 29, Murdock Grocery Company. The distribution should be noted on the bill and all vouchers together with the cancelled check should be filed in envelopes properly numbered to correspond with the number of the check.

See illustration, page 38.

HOUSEHOLD ACCOUNTS

Receipts: Dairy, Poultry	Receipts: Produce	Receipts: Cash	Receipts: Total	Date	Items
		15.40	15.40		Balance FORWARDED
		30	30	1	Our allowance for April
					Shoes for Mabel 3^{00}, 2 Vests 1^{00}
					10 yds Muslin 1^{00}; 4 yds Gingham 60¢
				3	Sugar 1^{00}; Raisins 25¢
					Sub to L. H. J. 1^{75}; to Successful Farming 1^{00}
				5	Collection 25¢, Ladies' Aid Society 25¢
.40			.40		2 doz. Eggs 40¢ (P); Medicine 50¢, Stove Polish 10¢
				6	Doctor 1^{00}, Ella 25¢, George 50¢, Necktie 25¢
	2		2		5 bu. Potatoes 2^{00}; Skillet 50¢
	.25		.25	8	5 Cabbages 25¢; Bread Knife 40¢
					Meat 50¢, Parlor Lamp 3^{00}
.50			.50	9	3 lb Crackers 25¢, Nuts 10¢; Eggs 50¢
					Boys 50¢; Corn Starch 10¢, Relief Socy 50¢;
				12	Collection 35
		30	30	13	Our Allowance; Rocker 7^{00}; Coal 5^{00}
	.40		.40		Prunes 1^{00}; Vegetables 40¢
				14	Suit for William 6^{00}; Hat for Geo. 75¢
					Concert 1^{00}; 2 yds. Ribbon 40¢
					1 Doz Plates 2^{20}; ½ doz Cups & Saucers 90¢
				15	School Books & Stationery 2^{40}; Kerosene 75¢
					Hams 1^{35}; Sociable 50¢; Shoe Strings 10¢
				17	Kitchen Cabinet 6^{50}; 2 Chairs 1^{39}
					Laundry 95¢; Toilet Soap 25¢
					3 lb Fish 45¢; Towel Rack 25¢
				19	Collection
				20	6 yds Toweling 60¢; Tacks 10¢
					1 gal Vinegar 30¢; Matches 25¢
					White House Cook Book 1^{50}, Acid 10¢
				23	Telegram 50¢; Telephone Rental 1^{50}
					Dress Making 2^{50}; Madrid & Return 2^{00}
				25	Rubbers 75¢; Stockings 50¢; Flowers for Mrs Kyd 1^{00}
		30	30		Allowance, Laundry 65¢; Lamp Wicks 10¢
				26	Collection
				29	City Meat Market
					Murdock Grocery Co
				30	Help for the month
	2.60		2.60		Vegetables, not entered
5.40			5.40		Poultry & Eggs
6.50			6.50		Milk, Cream & Butter
12.80	5.25	105.40	123.45		FORWARDED
1	2	3	4	5	

HOUSEHOLD

FOR THE MONTH OF April 1908

Ck. No.	TOTAL	GROCERIES	MEAT	DAIRY POULTRY	CLOTHING	FURNITURE UTENSILS	HOUSE LAUNDRY	LIBRARY	LIGHT FUEL	GIFTS	Phys. & Med	Personal			Travel Recre.	INCID'L
	4				4											
	1 60				1 60											
	1 25	1 25														
	2 75							2 75								
	50									50						
	1	40									50					10
	2				25						1	75				
	2 50	2				50										
	65	25				40										
	3 50		50			3										
	85	35		50												
	1 10	10								50		50				
	35									35						
75 76	12					7			5							
	1 40	1 40														
	6 75				6 75											
	1 40				40										1	
	3 10					3 10										
	3 15							2 40	75							
	1 95		1 35		10					50						
	7 80					7 80										
	1 20						95									25
	70		45			25										
	25									25						
	70															70
	55	30							25							
	1 60							1 50								10
	2															2
	4 50				2 50										2	
	2 25				1 25											1
	75						65		10							
	25									25						
77	9 50		9 50													
78	4 40	4 40														
79	10						10									
	2 60	2 60														
	5 40			5 40												
	6 50			6 50												
	112 75	13 05	11 80	12 40	16 85	22 05	11 60	6 65	6 10	2 35	1 50	1 25			3	4 15
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

CASH BOOK

SUMMARY OF HOUSEHOLD ACCOUNTS March 31, 1909.

Accounts	1904 Jan.	Feb.	March	1908 April	May	June	July	August	Sept.	Oct.	Nov	Dec.	Total
RECEIPTS													
Sundries	9 45	8 35	11 10	12 80	8 55	10 65	11 45	9 80	8 55	10 40	11 50	8 40	121 00
Produce	5 35	3 40	2 80	5 25	4 30	6 40	5 80	6 05	5 20	4 60	3 80	4 95	57 90
Cash	90 00	90 00	90 00	105 40	90 00	90 00	90 00	90 00	90 00	90 00	90 00	90 00	1095 40
Total	104 80	101 75	103 90	123 45	102 85	107 05	107 25	105 85	103 75	105 00	105 30	103 35	1274 30
PAYMENTS													
Sundries													
Incidental	1 40	2 40	5 45	2 65	5 30	3 70	2 40	1 05	3 00	1 15	3 20	11 40	43 10
Travel & Re		1 50	2 00	3 00	1 60			3 20		2 00		5 20	18 50
Personal	1 25	2 80	1 35	1 25	8 00	1 50	2 00	3 40	1 50	2 40	1 50	3 00	29 95
Gifts	50	5 00	11 35	2 35	1 25	5 00	6 30	1 50	2 60	75	2	21 40	60 00
Light, Fuel	4 20	3 20	6 20	6 10	3 00	4 70	3 60	7 20		5 50	6 30	5 20	55 20
Library	3 75	1 40	2 05	6 65	4 90		3 35		75			9 20	32 05
Help, Laundry	13 80	14 50	17 30	11 60	12 50	12 00	15 20	18 60	13 40	10 50	11 20	12 30	162 90
Furniture Utensils		18 00	7 60	22 05	1 30		7 40		13 00	3 20		9 60	84 15
Clothing	11 50	20 00	29 00	16 85	7 30	23 25	13 20	7 50	8 40	28 50	5 50	32 40	203 40
Dairy	5 50	5 40	7 20	6 50	4 50	6 00	5 10	6 10	4 45	5 55	6 25	4 65	67 20
Poultry	3 95	4 80	4 65	5 90	4 05	4 65	6 35	3 70	4 10	4 85	5 25	3 75	56 00
Meat	6 30	5 20	13 70	11 80	10 40	11 30	12 70	11 40	8 30	7 20	6 20	10 30	114 80
Groceries	12 35	11 30	12 75	13 05	25 30	16 85	19 30	18 40	15 35	13 40	14 70	19 50	192 25
SPECIAL ACCOUNTS													
Phys'n Mrs		75	50	1 50			40		75		2 00	1 50	7 40
Telephone	1 50	1 50	1 50	1 50	1 75	1 50	2 00	1 50	1 50	1 75	1 50	2 00	19 50
Miscellaneous	5 00	5 00							5 00	5 00	5 00	5 00	30 00
Savings Bank		5 00			20 00	8 00		12 00	5 00	15 00	20 00		85 00
Balance													12 90
Total	71 00	107 75	112 60	112 75	101 15	98 45	99 20	95 55	89 10	106 75	90 60	156 40	1274 30

NOTE—The items in the "Sundries" and "Incidental" Columns may be segregated under "Special Accounts."

SUMMARY OF HOUSEHOLD ACCOUNTS

CHAPTER VI

THE ANNUAL STATEMENT.

The annual statement exhibits in a condensed form the financial operations for a given period. It shows the resources and liabilities, the cash receipts and expenditures, the profits and losses, the net profit or loss, and the net worth. It enables the proprietor to analyze his business with considerable accuracy and to trace the sources of profits and losses. There are various forms of statements, but the illustration on page 39 seems best suited to the farming business. Statement No. 3 shows the results of a month's business only. The inventories are obtained from separate schedules and the cash receipts and expenditures are the totals found in the Cash Book.

The revenue accounts, or the accounts showing profit or loss, are fully analyzed on page 40. This is wholly independent of the other records. Three or four of the principal enterprises may be analyzed, as in the illustration, or the statement may go into greater detail to suit the condition of the business. Individual cost accounts are illustrated on page 43.

The method of preparing these accounts is as follows: Take the Grain account for example. We debit it with all the items that enter into the cost of its production, and credit it with the returns. The first item of cost in last year's inventory Financial Statement No. 2; Lesson 4), is $377.86; Labor (Horse and Man, from Labor Record), $440.00; Interest on the value of Land devoted to Grain (56 acres @ $55.00 per acre), 6 per cent., $184.80; Seeds and Fertilizers (Cash Payments), $129.71. The returns are: Present Inventory, $380.00; Cash Receipts, $712.43; Fed to Stock (Feed Record assumed), $770.07; Fed to Poultry, $50.00. From this we obtain the net profit, $780.13.

In a similar manner we consider the Stock account and the Hay account. The illustrations, pages 39 and 40, show the figures supplied from each account.

It should be borne in mind that this exercise in cost accounting is only suggestive. The principles are fundamental and correct, but their application in practice may vary greatly.

Form 14 Bexell's Farm Records

CASH RECEIPTS November 1910

Date	Items	Total	Apples	Pears	Other Crops	Assessments	Bills Payable	Live Stock	Sundries
1	Forwarded	139 28							139 28
	Farmers' National Bank	500					500		
4	200 bxs Newtowns 1 10	220	220						
5	110 " Bartletts 1 65	181 50		181 50					
	2 Tons Clover 10 50	21			21				
7	1 Jersey Calf	10						10	

Form 15 Bexell's Farm Records

CASH PAYMENTS November 1910

Date	Items or Payee	Check	Total	Househ'd Person'l	Land Imp'ts	Tools Equip't	Repairs Supplies	Crops	Salaries Labor	General Expense	Sundries
	Forwarded										
1	Fairbanks Land Co.	46	500		500						
4	Geo. A. Morse, Secy	47	15							15	
	R. H. Huston	48	50			50					
	M. L. Barnett	49	104 66					104 66			
5	A. Wilhelm & Sons	50	168 29		52	5	76 27				

Form A.

Form 16 Bexell's Farm Records

CASH RECEIPTS & PAYMENTS.

Form 17 Bexell's Farm Records

FOR THE MONTH OF November 1910

Receipts: Sundries	Stock Poultry	Crops	Total	Date	Items or Payee	Ck No	Payments: Total	House & Person	Hired Labor	Feed Suppl's	Repairs	Interest Taxes	Gen'l Exp	Apples Pears	Other Crops	Stock Poultry	Land Imp'ts	Tools Eq'ts	Bills Payable	Investments	Sundries
139 28			139 28	1	Balance Forwarded																
500			500		Farmers' National Bank																
					Fairbanks Land Co.	246	500										500				
		220	220	4	200 bxs Newtowns 1 10																
					Geo. A. Morse, Secy	247	15						15								
					R. H. Huston	248	50											50			

Form B.

ORCHARD ACCOUNTS

Thus, some farmers will charge live stock a certain amount for housing, perhaps also for the use of utensils, machinery, and the like; others will insist on deducting the cost and care of the dwelling from the annual farm inventory, since this is not capital invested in the business. For a full discussion of this subject, see Bulletin 73, Bureau of Statistics, U. S. Department of Agriculture.

Financial Statement, Year Ending March 31, 1910

Cash Receipts and Payments

Receipts		Payments	
Grain	$712.43	Household and Personal	$1152.80
Hay	204.20	Seeds and Fertilizers	129.71
Orchard and Garden	335.10	Hired Labor	435.70
Stock	13.00	General Expense and Marketing	289.39
Dairy	1018.12	Stock and Feed	445.20
Poultry	262.39	Implements	225.76
Sundries (itemize below)	3.42	Improvements	350.00
		Repairs	174.40
		Sundries (itemize below)	699.32
Bal. last yr. 126.04		Life Insurance 54.30	
Implements 60.81		Accounts Payable 252.32	
Hired Labor 155.15		Interest 230.00	
342.00		Taxes 38.60	
		Gifts 94.60	
		Insurance 29.50	
		699.32	
		Balance on hand (b)	271.96
Total	$4174.24	Total	$4174.24

Resources and Liabilities

Resources		Liabilities	
Farm (market value)	$9070	Hired Labor	$35
Cash and Bank, as above	271.96	Bills Payable	32.00
Life Insurance, paid up value	1139.80	Accounts Payable	90
Stock (a)	1948.50	Gifts	40
Grain (a)	389		
Hay (a)	163.75		
Orchard and Garden (a)	45		
Dairy Products (a)			
Poultry (a)	100.55		
Implements (a)	953		
Household Goods (a)	682.40		
General Supplies (a)	37.80		
		Net worth	$11429.76
Total	$14794.76	Total	$14794.76

(a) As per Inventory. (b) Difference between Receipts and Payments.

Statement of Profit and Loss

Net worth as above	$11429.76
Net worth last year (No. 2)	10334.98
Gain for the year	$1094.78
Less interest on investment, 6% x	375.93
Net earnings	$718.85

x on $6265.64, see pages 55 and 16

GENERAL BALANCE SHEET

Accounts Showing Profit or Loss, Year Ending March 31, 1910

(Amounts are taken from Inventories, Cash Book, and Special Records.)

GRAIN

Cost.			Returns.		
Inventory last year	$ 377	86	Present Inventory	$ 380	
Labor	430		Receipts from Sales	712	43
Interest on Value of Land	184	80	Fed to Stock	770	07
Seed & Fertilizers, Cash	129	71	Fed to Poultry	50	
Net Profit	780	13			
Total	$1912	50	Total	$1912	50

STOCK

Cost			Returns.		
Inventory last year	$1966		Present Inventory	$1948	50
Labor	385		Receipts from Sales	1300	
Grain	770	07	Receipts from Dairy	1018	12
Hay	149	80	Labor (Cash Receipts	155	15
Interest on Inventory last year	117	96			
Pasturage on Land	135				
Cash	445	20			
Net Profit	452	74			
Total	$4421	77	Total	$4421	77

ORCHARD AND GARDEN

Cost.			Returns.		
Inventory last year	$		Present Inventory	$	
Labor and Marketing			Receipts		
Interest on Land					
Net Profit					
Total	$		Total	$	

HAY

Cost.			Returns.		
Inventory last year	$ 130		Present Inventory	$ 168	75
Labor	30		Receipts	204	20
Interest on Land	63		Fed to Stock	149	80
Net Profit	299	75			
Total	$ 522	75	Total	$ 522	75

(Account) .....

Cost.			Returns.		
	$			$	
Total	$		Total	$	

GENERAL BALANCE SHEET

CHAPTER VII

COST OF PRODUCTION

Too often a good farm is compelled to carry unprofitable experiments and the whole business is pronounced a failure without an adequate attempt to find a remedy. In addition to the foregoing records, Mr. Harris has kept accurate cost accounts of the main branches of his business. In cost accounting there are four principal elements to consider: Cost of material, labor, interest, and depreciation. The cost records are independent of all the rest and may be kept of every branch of the business, if desired, or limited to one or more phases. In this instance, cost records have been kept of Live Stock, Grain, Hay, Dairy Products and Improvements. The Agricultural Experiment Stations are always willing to give the farmer important advice and assistance regarding the stock, grain, fruit, etc., best adapted for different localities and purposes. But conditions frequently arise where it is important for the farmer to carry on his own experiments. Your own Experiment Station will doubtless be glad to co-operate and suggest methods for carrying on such experiments even to the extent of furnishing necessary blanks and material. Important bulletins on the subject may be had for the asking from the Department of Agriculture, Washington, D. C.

The following announcement in the Crop Reporter for May, 1908, indicates what the government is doing in this direction:

Cost of Producing Farm Products

"The Bureau of Statistics is making an investigation of the cost of producing farm products in different parts of the United States. Blank forms have been printed upon which to make reports, and this Bureau desires to receive the names of such farmers as have kept records of cost of producing crops, or are well informed upon the subject of cost of crop production in their locality, in order that blank schedules may be sent to them to fill in. Individual reports will not be published—only the average of many reports. Names should be sent to the Bureau of Statictics, Department of Agriculture, Washington, D. C."

Every farmer should avail himself of this important free service. "Keeping posted" is one of the characteristics of the progressive and successful farmer. There are two exceptionally valuable bulletins on the subject which ought to be in the library of every farmer: U. S. Department of Agriculture, Bureau of Statictics, Bulletin No. 48, and University of Minnesota, Agri. Ex. Station, Bulletin No. 97.

Live Stock

Either of three methods may be employed in finding the cost of live stock.

First Method. Ascertain exactly the total amount of grain, hay, and roughage on hand at the beginning of the year, and produced during the year. From this subtract the quantity sold, including amount used by the household and for seed, and the amount on hand at the end of the year. The difference is the quantity used for live stock. The value at market prices is the expenditures of feed for live stock.

Find the total amount received for dairy products, including amount used by the household. The difference between the cost and the receipts is the gain. The disadvantage of this method is that no account is taken of individual animals nor of different kinds of stock. The herd as a whole may be a paying investment and still there may be individual animals carried at a loss. It is desirable that such records be kept, at least occasionally, as will enable the farmer to eliminate unprofitable animals.

Second Method. The following actual record of a dairy herd of twelve cows illustrates a much more satisfactory test than the preceding. Individual record was kept of the milk produced by each cow, but the feed was weighed for the entire herd, and the average cost charged to each animal at market prices.

With this average before him, a careful feeder will be able to make mental corrections for each individual animal, accurate enough for most practical purposes. The milk record has been kept, as illustrated on page 49

Pearl (Dairy Cow)

1908									
Ap.	1	Market value a year ago	50		Apr.	1	Value now	45	
		Feed for the year	42	30			Milk produced	67	50
		Care	4				Calf	5	–
		Dehorning		50					
		Doctor	2						
		Interest on 50, 7%	3	50					
		Incidental	2						
		Net Gain	13	20					
			117	50				117	50

Wheat

20 A., 5th Crop

1908									
Ap.	1	Value of Land at year ago	1100		Ap.	1	Value of Land now	1078	
		Interest, 7%	77				Less 2% for over cropping	.	
		Labor & Time	63				418 bu. Wheat @ 75¢	313	50
		Seed, 3½ bu.	30				Straw	15	
		Threshing	29	25					
		Marketing	8						
		Fertilizers							
		Net Gain	39	25					
			1406	50				1406	50

Test of Dairy Herd for March, 1909

No. Cow.	Lbs. Milk for Mo.	*Test.	Lbs. Fat.	Val. at 36c.	Cost of Feed.	Net Profit.
1.	465	4.5	20.93	$ 7.53	$6.21	$1.32
2.	372	5.0	18.60	6.70	"	.49
3.	620	5.0	31.00	11.16	"	4.95
4.	372	7.0	26.04	9.37	"	3.16
5.	496	4.8	23.80	8.57	"	2.36
6.	682	4.7	32.05	11.54	"	5.33
7.	558	4.4	24.55	8.44	"	2.23
8.	620	4.1	25.42	9.15	"	2.94
9.	496	4.2	20.83	7.50	"	1.29
10.	651	4.9	31.90	11.48	"	5.27
11.	558	5.0	27.90	10.04	"	3.83
12.	589	5.0	29.45	10.60	"	4.39

*These figures were obtained by the Babcock test, which is described in every modern work on dairying.

Feed for the Month of March

Hay, 4,900 lbs. at $9.00 per ton	$22.05
Kale, 9,600 lbs. at $2.50 per ton	12.00
Bran, 1,800 lbs. at $30.00 per ton	27.00
Shorts, 900 lbs. at $30.00 per ton	13.50
Total	$74.55

74.55 divided by 12 equals 6.21, average cost of feed.

Third Method. The difference between the second and third methods is that in the latter accurate records are kept of individual feed rations, while in the second method an average is taken. The error resulting from averaging the feed between all the animals in a large herd may be such as to unduly favor certain animals and do injustice to others. The only absolutely accurate method is to keep an account with each animal; at least with such animals as show a tendency to be unprofitable. Page 43 shows an individual account with one of the milch cows on the Harris farm. It is arranged on the regular Ledger form. Opposite pages of the Day Book may also be used. The detailed information regarding Feed, Milk, Labor, etc., is found in the respective records, illustrated on pages 49 and 50 respectively. Similar accounts are kept of each animal, tested preferably during the entire lactation

period. It is only in this way that the careful farmer can determine whether each animal is kept at a gain or a loss. The weeding out of one or two unprofitable animals a year will pay for the labor of keeping the cost records many times over.

Cost of Crops

The principles laid down in respect to the cost of animal products hold true also for the cost of farm crops. Two methods suggest themselves. Accounts with the various crops and accounts with the different fields. Either method requires detailed records of the labor, seed, fertilizer, etc., expended on the crop and of returns not only for cash sales, but for products used by the household and for feed. On page 43 is illustrated an account with the wheat crop in 1908. Only one item needs explanation, that of depreciation, due to continuous cropping. Whether the rate, two per cent, is too high or too low, matters little; the important point to be emphasized is that the value of the land diminishes unless rotation of crops is practiced.

CHAPTER VIII

SPECIAL RECORDS.

There are several convenient special records which ought to be adopted, besides those I have illustrated. It is not necessary that expensive printed books be provided. A plain sheet of paper may be ruled as suggested below and pasted in the Bill File. In fact, this is in many respects preferable to printed forms, because the forms can then be changed from year to year to suit conditions.

Labor Records

The best form of labor record is illustrated on pages 49 and 50. In one, account is kept with the object upon which labor is expended; in the other, with the laborer. For ordinary purposes, page 49 is the most convenient, but where several men are engaged on a project, form (a), page 51, is preferable.

Where the loose leaf book is used it is convenient to tack a sheet to a board, and hang it in a convenient place until it is filled, when it may be filed permanently. See illustration, page 53.

Milk Records

Two milk records are illustrated on pages 49 and 51. Each possesses certain advantages over the other. The weekly record need not be so large and admits of larger spaces, while the monthly record exhibits the entire month's result on a single page. The weekly record is more appropriate for filing, being less liable to soiling. Whichever form is used, it should be tacked to a board in a convenient place for the milker. A spring scale, graduated to hundredths, should be hung near the record, far enough from the wall for the pail to hang freely. The original records should be filed for at least a year. If a daily time book is kept, it may also be adapted for the milk and poultry records.

Poultry Records

Practically the same form as the milk record can be used conveniently for the Egg record, and it is not deemed necessary to enlarge further on the subject.

The methods of improving the poultry stock, and other ful information regarding the poultry business, is found in numerous books and bulletins on the subject.

Duplicating Sales Book

It is often convenient to retain a duplicate of sales, orders, receipts, etc. It will be found very helpful to the farmer and to the dealer alike, if the farmer prepares a bill of the produce he brings into town for sale. This will often avoid misunderstanding and may save money. This is especially true if the produce is sent in by children or by someone not connected with the family. On page 51 is illustrated a very convenient book which is kept in stock in most stationery stores. Where this system is used, it is advisable that *every* sale be recorded, and then listed as shown on page 50. In entering in the Cash Book, the sale number should be inserted. All sales to merchants should be considered as cash, even if the produce is exchanged for merchandise. If sales are made on time, note the fact on the bill, and enter it into the personal account as illustrated on page 18.

The Farm Plot

There is one more record which I cannot urge too strongly. I refer to the yearly plots. This record will prove to be one of the most valuable and interesting parts of the farm history. A plot is easily made by first drawing a square on a blank piece of paper and then sketching the fields. It is, of course, unnecessary to draw this to scale. A close approximation is all that is necessary. Below is an illustration.

The Farm Office

Talk about an office on the farm! Why not? Why should not the average farmer enjoy at least a comfortable desk and neatly printed stationery? Every boy loves "to do business." Surround him with a business atmosphere on the homestead and he will stay by you and succeed you in your old age; continue in your slip-shod methods and he will move to town and become a cheap clerk instead of a landed proprietor. Encourage your children to assist in your business; make them feel that they are intimately associated with you; take them into your confidence and, as they grow older, into your counsel,

especially when you are considering your annual balance sheet and a greater prosperity, wider influence, and a more contented family will be your reward.

A very convenient desk is illustrated on page 6. Besides the usual drawers, pigeon holes, etc., it contains a fire proof safe which affords ample protection against fire and burglars. It is built especially for farmers by The J. K. Gill Company, Portland, Oregon, at a very moderate price.

MILK RECORD

Week ending June 5 1909

Test	NAMES	Sunday Mor	Sunday Ev.	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Total
4.5	Kate	12	10	12	11	10	13	11	13	12	11	11	12	12	12	162
5.0	Anthia	13	13	13	14	12	13	12	13	14	13	14	12	13	11	190
7.0	Dudget	7	8	8	7	8	9	8	8	10	8	10	8	9	9	117
4.8	Lady	11	12	10	11	10	12	10	11	11	10	12	11	11	11	153
4.7	Beauty	11	11	11	10	11	13	14	12	12	11	12	12	13	11	164
4.4	Glenco	12	13	11	12	11	12	10	12	10	11	11	11	12	10	158

(a) Feed Record, Dairy Cows, June, 1909

Weight	Name or No.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total	Value	Remarks
800	Kate	Hay																																115		Dry
		(a) Grain																																1920	4.12	alfalfa
		(b) Soil																																		
975	Anthia																																	224		
																																		2420	6.38	
1460	Dudget																																	175		
																																		2840	6.18	
1120	Lady																																	230		
																																		2630	6.18	
830	Beauty																																	118		
																																		2040	4.32	
1440	Glenco																																	150		
																																		3020	6.42	

(a) Pounds, $30.00 per ton; (b) Pounds, Cream $2.50 per ton

(b) Daily Labor Record, June, 1909

Account	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Hrs.	Rate	Am't	Remarks
Corn							9	9	9	9																						36	30	10 80	Man & Team
Live Stock																		4										8				12	30	3 60	"
Orchard			3											2									1									6	15	90	
Improvements							4					4							3						2							13	15	1 95	
Machinery & Implt	1				2										1							3										7	15	1 05	

FEED RECORD

Kind of Stock: Dairy Cows — Week ending: June 5, 1909

Live Weight	NAME OR NUMBER	SUNDAY Hay	SUNDAY Grain	SUNDAY Soil	MONDAY Hay	MONDAY Grain	MONDAY Soil	TUESDAY Hay	TUESDAY Grain	TUESDAY Soil	WEDNESDAY Hay	WEDNESDAY Grain	WEDNESDAY Soil	THURSDAY Hay	THURSDAY Grain	THURSDAY Soil	FRIDAY Hay	FRIDAY Grain	FRIDAY Soil	SATURDAY Hay	SATURDAY Grain	SATURDAY Soil	Total Hay	Total Grain	Total Soil
800	Kate		4	64		4	63		3½	63		4	65		4½	64		3½	62		4	64		27½	445

Stock Record, Harris' Farm

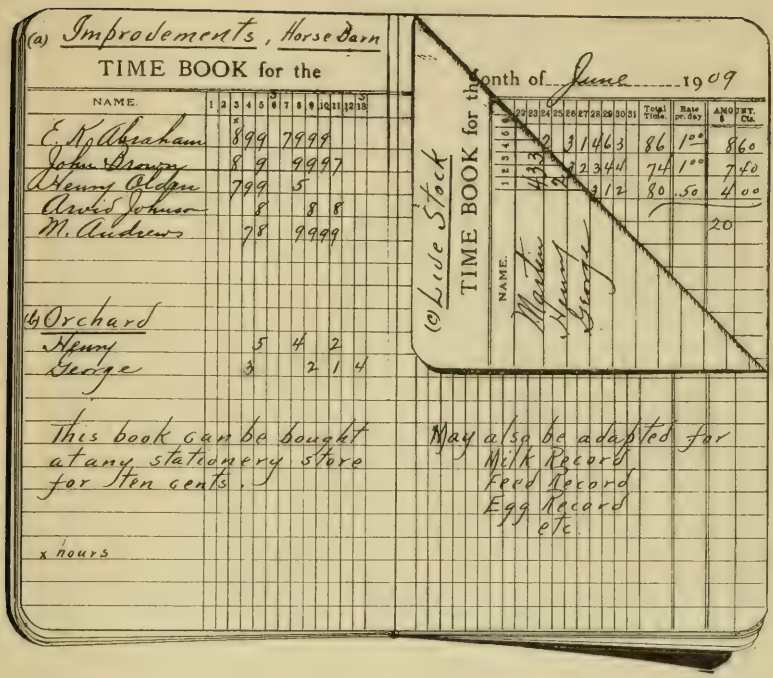
No.	Animal	Breed Name	Birth		Mark Color	How disp'd of	Buyer	Date		Weight	Price	
35	Cow	Jersey Fanne	1904 Feb	4		Sold	J. P. Smith	1907 Aug	5	1000	80	
36	Steer	S. H.	May	8	Red	"	John Winkle	Sep.	8	1150	60	
37	Horse	Maud			Bay	Died						
1	2	3	4		5	6	7	8		9	10	

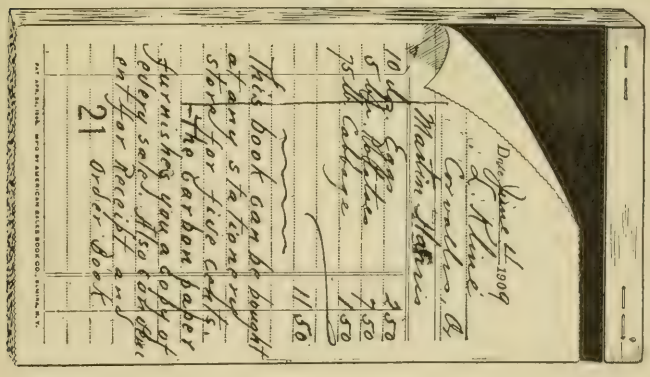
Breeding Record, 1909

No.	Animal: Horse 11½ mo.	Cow 9½ mo.	Hog 4 mo.	Date: Bred		Due		Drop'd		Sire	Fee	Owner	Remarks
1	Maud			4	15	4	1	4	5	Prince	15.00	Hopkins	Normal
2		Loretta		1	5	10	20	10	23	Paul	7.00	Smith	Small
3			No. 5	12	20	4	20	4	17	Red	—	Self	5 Med.
1	2			3						4	5	6	7

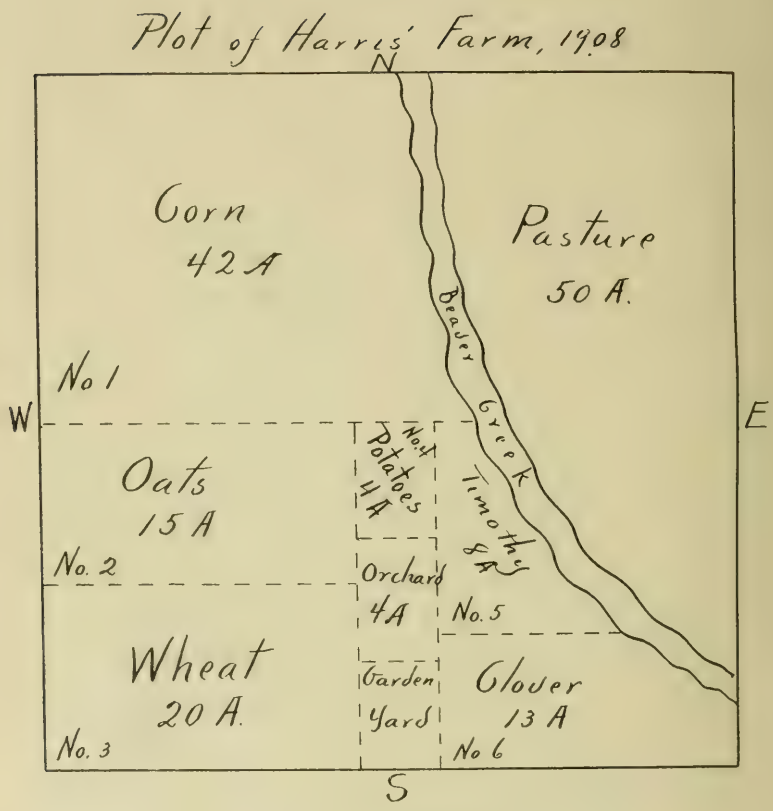
Sales Record, 1909

Date		No.	To whom	Articles	Paid		Charge		Page
Nov	4	14	Johnson Bros	12 Dz Eggs 24¢; 5 lb Butter 12¢	3	65			
	7	15	Kahn El. Co	34 bu. Corn	170				
	10	16	Avery Hotel	25 bu. Potatoes	12	50			
	25	17	J. P. Smith	5 bu. Potatoes			2	5	
	27	18	Chicago Market	5 Steers 5462 lb.	191	70			
1		2	3	4	5		6		7





TIME AND SALES BOOK



THE FARM PLOT

Form 5 Bowen's Farm Accounting

DAILY LABOR RECORD, Month Ending, May 31 1910

Account or Name	No.	1	2	3	4	5	S 6	7	8	9	10	11	12	S 13	14	15	16	17	18	S 19	20	21	22	23	24	S 25	26	27	28	29	30	31	Hrs.	Rate	Amount	Remarks
Orchard				3											2								1										6	15	90	
Corn								9	9	9	9																						36	30	10 80	M & T.
Live Stock																		4								8							12	30	3 60	"
Improvements							4						4						3						2								13	15	1 95	
Machinery & Impl		1			2										1							3											7	15	1 05	
Wheat					9	9											9	9															36	30	10 80	M & T.
Onions			9	9								6																					24	15	3 60	
Potatoes																					9			6	5								20	30	6 00	M & T.
Hay											3				6										5								14	30	4 20	"
Oats																										9			9	9	7		34	30	10 20	
																																			53 70	

Form 9 Bowen's Farm Accounting

FEED RECORD

Kind of Stock Dairy Cows Week Ending May 31 1910

Weight	Name or No.	Sunday			Monday			Tuesday			Wednesday			Thursday			Friday			Saturday			Total	
		May 4 Soil																						
800	Kate	4	60		4	63		3½	63		4	65		4½	65		3½	62		4	64		27½	445
975	Anthia	8	80		8	80		8	80		8	80		8	70		9	87		7	81		56	553
1460	Dixie	6	92		6	92		6	92		6	92		6	92		6	92		6	92		42	644
1220	Lady	8	90		8	90		8	90		8	90		8	90		8	90		8	90		56	630
830	Dagatty	4	68		4	68		4	68		4	68		4	68		4	68		4	68		28	476
1440	Glencoe	7	110		6	100		7	110		7	110		6	100		6	100		7	110		46	740
950	Pet	7	80		7	80		7	80		7	83		7	83		7	83		7	83		49	572
1000	Bess	6	86		6	86		6	86		6	86		6	86		6	86		6	86		42	602
1270	Cynthia	8	100		8	100		8	100		8	100		8	100		8	100		8	100		56	700
850	May	5	65		5	65		5	65		5	65		4	60		4	60		4	60		32	446
900	Jessie	6	70		6	70		6	70		6	70		6	70		6	70		6	70		42	490
1375	Alta	8	100		8	100		8	100		8	100		8	100		8	100		8	100		56	700
1050	Ruby	24	4½	42	25	4	43	23	5	45	24	4½	42	25	4	43	25	4½	45	23	5	43	169	31½	305
1300	Pauline	27	6	45	27	6	45	27	6	45	27	6	45	27	6	45	27	6	45	27	6	45	189	42	315
1350	Princess	30	7	48	30	7	48	30	7	48	30	7	48	30	7	48	30	7	48	30	7	48	210	49	336

x Pounds

MILK AND LABOR RECORD

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Oregon Agricultural College Bulletin

Series 1 Issued Monthly No. 33

Entered at postoffice, Corvallis, Oregon, as second-class matter under act of Congress of July 16, 1894.